

ABSTRACT

A device 20 for detecting a resonant frequency comprises a sound source means 21, a signal synthesization switching means 26 and 27, and a measuring means 25. The signal synthesization switching means 26 and 27 are capable of switching between a first state in which the signal synthesization switching means 26 and 27 outputs a measurement signal and a second state in which the signal synthesization switching means 26 and 27 outputs a synthesized signal containing the measurement signal and the signal output from a microphone 14. The device 20 detects the resonant frequency based on comparison between the first amplitude frequency characteristic measured in the first state and the second amplitude frequency characteristic measured in the second state.